

**WESTERN NAVAJO PLATEAU AML RECLAMATION  
PROJECT****CLOSEOUT REPORT**

NAVAJO NATION  
DIVISION OF NATURAL RESOURCES  
NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM  
TUBA CITY FIELD OFFICE  
TUBA CITY, ARIZONA

*Prepared by:*

*Lorenzo Begay*  
*Principal Engineering Technician / Project Manager*

Post-it® Fax Note	7671	Date	2.20.03	# of pages	11
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FILE w/  
WNP PROJECT

## **WESTERN NAVAJO PLATEAU AML RECLAMATION PROJECT**

**Contract No. : C22342**

**Award Amount: \$415,722.00 (Modified)**

\$408,000.00 ( Original)

**Term of Contract : September 30, 2002 to January 31,2003 (Modified)**

September 30,2002 to January 27,2003 (Original)

**Duration of Contract: 124 Calendar Days (Modified)**

120 Calendar Days (Original )

**Notice to Proceed Issued: September 30,2002**

**Pre-Construction Meeting: September 12,2002**

**Principal Contractor: Silver State Construction Company,Inc.**

**P.O. Box # 3000**

**Shiprock , New Mexico 87420**

The Western Navajo Plateau AML Reclamation Project consisted of a total of **20** sites located in the Cameron,Coalmine Mesa,Gap/Bodaway and Coppermine,Arizona ,on the Navajo Nation. NA-0257 was not done per agreement by both parties.

Initial reclamation work activities started with mobilization to project sites in the Cameron, Arizona area on October 01,2002. Earthwork was started on October 01,2002 with Class A stockpiling at the designated borrow site.

Silver State Construction Company (SSCC) obtained clearances to haul water from an earthen dam in vicinity of site NA-0175 approximately 12.3 miles southeast of Cameron, Arizona and on the east side of the Little Colorado River.

Earthwork completed was as follows; classified excavation of mine waste to backfill one (1) abandoned portal with specified backfilling sequence. Work was done on all reclaimed surfaces to conform with specified contours, erosion potential minimized, rough grading / scarifying of surfaces, outlying drainages diverted, positive drainages off reclaimed areas ensured with long-term erosion minimized.

Additional earthwork completed was as follows; excavation of burial/borrow areas , stabilization and backfill work on a series of subsidence areas, repair a stock dam and stockpiling /transporting Class A material.

Other reclamation work included a polyurethane foam (PUF) closure on an open portal, dismantling/burial of concrete structures and bulkhead closure at one site.

**CHANGE ORDER NO.1** was for additional negotiated work at site NA-0164 for an extra 1,500 cu. yds. of Class A cover material. The extra material was necessary for final cover of mine waste , pursuant to NN AML Reclamation radiological cleanup standards.

The contractor requested for an additional four (4) calendar days time extension to complete CHANGE ORDER NO. 01's scope of work.

For completion of the above additional work ,this time extension was justified. work at NA-0164 and additional specified work was completed at final stages of this project.

Post radiological surveys were completed, with passing results with all recorded readings under the Navajo Nation AML Health Physics guidelines for radiometric cleanup levels of 25 pCi/gm of residual RA-226 concentration in the first 6 inches of reclaimed surfaces.

At peak workforce capacity, a total of (12) twelve contract personnel and (10) ten equipment were utilized at different sites depending upon contractor's workload. The following equipment were used; (1) D6MX DOZER, (1) 966G LOADER,(1) 320 CL TRACKHOE, (1) 4,000 GAL. WATER TRUCK, (2) 500 GAL. WATER TRUCKS, (1)140H MOTOR GRADER, (1) 563 SHEEPSFOOT ROLLER, and (2) 12 CY END DUMPS.

Listed below are the cumulative data on all AML features for this project:

AML FEATURES	ORIGINAL NARRATIVE	ACTUAL COMPLETION
Portals (P) and Vertical Shafts (V.O.)	(1) 15 bcy PUF material	(2) Vertical Openings (1) 12 bcy PUF material (1) 4 bcy PUF material
Dangerous Piles Embankment (DPE)	15,500 bcy	9.33 ac
Pit (Natural Pits)	(not given)	n /a
Dangerous Highwall (HW)	(not given)	828 linear feet (l. ft.)
Access Roads/Haul Roads (AR/HR)	(not given)	10.42 ac
Subsidences	(not given)	5
Berms	300 bcy	400 bcy
Miscellaneous (concrete)	350 bcy	• 350 bcy(concrete) • 30 cinder blocks and 10 bags of 80 lbs. cement
Class A	22,500 bcy	
Wastepile (WP) (copper)	(not given)	

#### NA-0164

Contractor mobilized to vicinity of this site on October 01,2002 and started preparatory work on pad for 3,500 gallon water storage tank . Trackhoe began Class A excavation, process work and stockpiling at the designated borrow area. Scope of work at this borrow area was done in conjunction with availability of water provided by water trucks.

**NA-0164** (cont'd)

This site included 1 open pit and associated waste piles. The waste piles were excavated, consolidated and backfilled into north pit area.

Class A material from within site(approximately 1,000 bcy) and from the designated borrow area(approximately 900 bcy) was used as cover material on the backfilled area.

**CHANGE ORDER NO.01** was initiated to address additional Class A needed to complete remedial work for this site. A total of 1,500 bcy, from within site boundary, was used to complete work on January 24,2003.

A total of 11 work days was expended to complete this site

A final verification survey was completed on January 27,2003 with passing results.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Pit (P) (ac)</b>	<b>Haul Road (HR)</b>	<b>Class A (bcy)</b>	<b>Miscellaneous</b>
2.01 ac	1.55 ac	(1,584 l.ft.) 0.55 ac	(2,500 bcy w/in site) (900 bcy @ 75 loads)	
<b>Total: 2.01 ac</b>	<b>1.55 ac</b>	<b>0.55 ac</b>	<b>3,400 bcy</b>	

\*No access road upgrades was necessary for this site.

**NA-0158a**

This site included 2 waste areas(Waste Area 1 and Waste Area 2) and 1 rimstrip. Excavation work was done via selective handling techniques . Mine waste from both waste areas was excavated ,transported and backfilled at the designated burial area. The rimstrip areas were backfilled in place and mounded slightly as specified. A 200 l.ft. diversion berm was constructed upgradient from the burial area. All disturbed areas were scarified but haul road from the designated borrow area was left intact due to public use.This haul road was used to import Class A cover material ,from the designated borrow area ,to this site using 2 - 12 cubic yard End Dump Trucks.

Reclamation work activities was started on October 10,2002 and completed on October 17,2002.

A final verification survey was completed on January 27,2003 with passing results.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Haul Road (HR) (ac)</b>	<b>Class A (bcy)</b>	<b>Drainage (Berm) (l. ft.)</b>	<b>Miscellaneous</b>
0.15 ac	(5,280 l.ft.) 1.82 ac	1,164 bcy (97 loads)	200 l.ft.	
<b>Total: 0.15 ac</b>	<b>1.82 ac</b>	<b>1,164 bcy</b>	<b>200 l. ft.</b>	

**NA-0158b**

This site is situated in northerly direction from NA-0158a and included 3 Waste Areas, 2 Rimstrips and designated burial areas within site boundaries. Excavation work was done via selective handling techniques . Consolidated waste material was transported and backfilled into designated burial areas. Class A material transported from the designated borrow area was utilized as cover material at 2 feet minimum depth. Contouring and rough grade work was completed at final stages of reclaim work.

Abatement work was started on October 22,2002 and completed on October 24,2002. A final verification survey was done with all readings below the 25 piCo/gr limits.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Haul Road (HR) (ac)</b>	<b>Class A (bcy)</b>	<b>Miscellaneous</b>
0.64 ac	(6,336 l ft.) 2.18 ac	2,208 bcy (184 loads)	
<b>Total: 0.64 ac</b>	<b>2.18 ac</b>	<b>2,208 bcy</b>	

**\* No access road upgrades was necessary for this site.**

**NA-0159**

This site consisted of a small rimstrip and associated wastepiles. Both wastepiles were excavated and consolidated into rimstrip area and mounded slightly to ensure positive drainage. Class A cover material from within site was used to cap off mine waste. Disturbed work areas was tracked via dozer creating slightly rough surface and access road was scarified at closing stages of work.

Reclamation work was started on October 17,2002 and completed on October 22,2002. A final verification survey was completed on January 08,2003 with passing results.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Access Road (AR) (ac)</b>	<b>Class A (bcy)</b>	<b>Miscellaneous</b>
0.17 ac	(1,300 l ft.) 0.45 ac	250 bcy	
<b>Total: 0.17 ac</b>	<b>0.45 ac</b>	<b>250 bcy</b>	

**\* No access road upgrades was necessary for this site.**



### NA-0175 DAM REPAIR

This site involved repair work which entailed excavation and backfill of a breached portion of a dam. All borrow material came from a designated borrow area within site boundaries. This material was subject to soil testing to comply with compaction and water density requirements in all phases of specified work.

A subcontractor ,Western Technologies,Inc.,Flagstaff,Arizona conducted all necessary field tests ensuring backfill material met required specifications of 95% Proctor, plus or minus 2% of optimum moisture content.

At initial stages of dam repair work, all vegetation on east bank of dam and at borrow area was grubbed out ,as part of preparatory work.

A total of 10 earthmoving equipment plus 2 water trucks were used to conduct all phases of work.

Excavation of the breached dam section was completed per specifications including construction of a 60 feet long x 8 feet wide x 4 feet deep keyway. A 3: 1 side slope was maintained from bottom base of keyway to top of dam. Special emphasis was adhered to during backfill work with proper lifts put in place and compaction tests done from start to finish both at keyway and at breached dam . Adequate moisture was applied during processing of all fill material.

Specified work on widening the dam on east embankment was completed per specifications with proper side slopes and required compaction and water density testing. All disturbed areas was contoured to blend in with surrounding terrain.

Specified work at this site was started on October 30,2002 and completed on November 12,2002.

No radiological monitoring activities or a final verification survey was warranted since this is a non-uranium site.

### NA-0114d / Area A

This project site consisted of 1 Waste Area, comprising 2 waste piles,1 rimstrip with a designated burial site. Mine waste from both waste piles was excavated and backfilled within the rimstrip feature and mounded accordingly. A borrow cell (approximately 100 bcy) was excavated below mesa area. This cover material was transported,mounded and used as cover material over backfilled mine waste via Front End Loader.

Remediation work was started on November 19,2002 and completed on November 20,2002. A final verification survey was completed on January 09,2003 with all readings under the 25 piCo/gm limits.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Haul Road (HR) (ac)</b>	<b>Class A (bcy)</b>	<b>Miscellaneous</b>
0.80 ac	(370 l.ft.) 0.13 ac	100 bcy	
<b>Total: 0.80 ac</b>	<b>0.13 ac</b>	<b>100 bcy</b>	

**NA-0114d / AREA B**

This site consisted of 2 Waste Areas, 1 rimstrip, and 1 vertical opening (V.O.). Mine waste was excavated from rim edge at WP-1 area and transported to Rimstrip # 2 for burial. Waste Area 2 was excavated and backfilled into burial area at Rimstrip # 2.

A borrow cell (300 bcy) was excavated on north perimeter within site boundaries and Class A material was transported to burial area and used as final cover. All the haul roads and access roads were scarified at final stages of abatement work. Work on this site was started on November 18,2002 and completed on November 19,2002.

The final verification survey was completed with passing results on January 09,2003.

<b>Dangerous Piles &amp; Embankment (DPE)</b>	<b>Haul Road (HR)</b>	<b>Class A</b>	<b>Vertical Opening (V.O.)</b>
0.12 ac	0.21 ac	300 bcy	1
<b>Total: 0.12 ac</b>	<b>0.21 ac</b>	<b>300 bcy</b>	<b>1</b>

**NA-0113**

This project site consisted of four (4) rimstrip areas, an open pit and associated wastepiles. Excavation and transport of said mine waste was completed at all Waste Areas and backfilled into specified rimstrip areas. Selective handling procedures was performed during all Class C work activities. Contour work was done to blend in shallow mounded areas with natural terrain and sloped accordingly. A borrow area was excavated at southwest perimeter within site boundaries and used as Class A cover. Drainage areas were not blocked and all access roads were scarified.

Reclamation work was started on December 04,2002 and completed on December 11,2002.

A Final Verification survey was completed for this site on January 09,2003.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Pit (P) (ac)</b>	<b>Access Road (AR) (ac)</b>	<b>Class A</b>	<b>Miscellaneous</b>
2.12 ac	0.03 ac	0.31 ac	1,100 bcy	
<b>Total: 2.12 ac</b>	<b>0.03 ac</b>	<b>0.31 ac</b>	<b>1,100 bcy</b>	

**NA-0116**

This site consisted of four (4) cluster areas that contained rimstrips with associated wastepiles. Wastepile # 1 ,designated as Class A, was used as cover material during latter stages of work in Area # 1. Abatement work was started at Area # 1 with access road upgrading and excavation/stockpiling of Wastepile # 1. Backfilling of rimstrips and highwall area was completed using Wastepile # 1 was cover material as specified.

Waste Area B abatement work included excavation/consolidation of Wastepile # 3 and transport to rimstrip for burial. Armoring of toe at Rimstrip # 3 was completed using cover material from designated borrow area at west perimeter of site. Highwall feature associated with Rimstrip # 3 was eliminated and contoured with natural topography.

Waste Area C abatement work included excavation and backfilling of Rimstrip # 4 as required. Class A material from the designated borrow area was utilized as cover.

At Waste Area D, excavation work was completed ,per specifications, except for a small area at west perimeter of this site.

On November 26,2002, explosive material was uncovered at this location. A site assessment was completed by NN AMLR and by SSCC and disposal of said explosives was completed by a sub-contractor. Per a mutual agreement, scope of work at this location for reclamation work was put on hold until at a later date.

All access roads into the four (4) reclaimed areas were eliminated by scarification.

A final verification survey was completed, excluding the aforementioned location ,was completed with all recorded readings under the acceptable 25 pCi/gm limits.

<b>Dangerous Piles &amp; Embankment (DPE) (ac)</b>	<b>Haul/Access Road (ac)</b>	<b>Class A (bcy)</b>	<b>Dangerous Highwall (HW) (l. ft.)</b>	<b>Miscellaneous</b>
2.15 ac	0.24 ac	1,250 bcy	325 l. ft.	
<b>Total: 2.15 ac</b>	<b>0.24 ac</b>	<b>1,250 bcy</b>	<b>325 l.ft.</b>	

**NA-0141 COALMINE MESA**

This site consisted of five (5) subsidence areas that involved excavation , backfilling and compaction work. Borrow material from within site boundaries was utilized as cover material and as fill material.

All five (5) subsidences areas were excavated to specified depths and side sloped at a 2:1 ratio. Adequate moisture was applied on all stockpiled material.

Field assessments were made on each excavated subsidences by both NN AML and by SSCC before backfilling procedures was completed as required.

Specified work was started on December 12,2002 and completed on December 18,2002.



NA-0141 COALMINE MESA (cont'd)

No uranium radiometric work activities was warranted on this site. Contractor started mobilizing to Coppermine 2 sites on December 18,2002.

Subsidence (ac)	Class A (bcy)	Miscellaneous
0.22 ac	800 bcy	
<b>Total: 0.22 ac</b>	<b>800 bcy</b>	

\* No access road upgrades necessary for this site.

NA-0259 Open Portal Site

This project site consisted of one(1) prospect and associated wastepiles.

Due to difficult accessibility to portal site more time was spent on accessing the shortest possible route to site than was spent on actual abatement work.

Preparation work involving manual transport of all necessary material, including **12 cubic yards** of polyurethane foam material (PUF), lumber and other relevant material was completed the first two days.

Specified PUF closure work and rock backfill to disguise opening was completed on December 20,2002. Additional backfill work ,mandated per AML inspection , was completed on January 21,2003.

NA-0252 (Copper site)

This project site consisted of two(2) rimstrips, associated copper wastepiles and concrete structures. Access road upgrades were addressed the first day as required. Rimstrip # 2 was excavated and dismantling/breaking up, into two foot pieces, of concrete structures was completed. All concrete pieces were backfilled at Rimstrip # 2 area and mounded accordingly. Excavation work of Rimstrip # 1 and backfilling of Waste Area # 1 was completed. Positive drainage requirements was adhered to on mounded areas with no retention areas.

Reclamation work was started on January 06,2002 and completed on January 10,2003.

No radiometric work was done at this site,this being a abandoned copper site.

Wastepile (ac)	Access/Haul Road (ac)	Class A	Miscellaneous
0.31 ac	(842 1 ft.) 0.29 ac	400 bcy	<b>Concrete: 350 bcy</b>
<b>Total: 0.31 ac</b>	<b>0.29 ac</b>	<b>400 bcy</b>	<b>350 bcy</b>

**NA-0255 (Copper site)**

This project site consisted of two (2) prospects, one(1) rimstrip and associated copper wastepiles. Upgrades on access road was completed the first day as necessary. Interior of both prospects were backfilled using associated waste material (approximately 80 bcy) and exterior were backfilled/sloped using rocky material (approximately 30 bcy) to ensure positive drainage. Access road incoming from south x southeast direction was scarified using dozer at latter stages of work activities. No radiometric work activities was necessary for this site

<b>Dangerous Highwall (HW) (l. ft.)</b>	<b>Access Road (ac)</b>	<b>Class A</b>	<b>Wastepile (bcy)</b>
75 l.ft.	(300 l.ft.) 0.10 ac	30 bcy	80 bcy
<b>Total: 75 l.ft.</b>	<b>0.10 ac</b>	<b>30 bcy</b>	<b>80 bcy</b>

**NA-0256 (Copper site)**

This project site consisted of one(1) prospect and associated copper wastepiles. Associated minewaste(approx. 20 bcy) was trammed into opening using Trackhoe. The scope of work was changed , per mutual agreement, from straight backfilling to bulkheading prospect opening using cinderblock and reinforced cement construction. A total of **30 cinderblocks** and **10- 80 lbs. bags of cement/mortar** was used to seal opening. Steel rebars were used to stabilize and strengthen base and cement wall structure. Exterior of opening was backfilled using rocky material(approximately 25 bcy) and sloped against natural sandstone to disguise opening.

Work was started on January 15,2003 and completed on January 17,2003.

No radiological monitoring was warranted for this site.

**FINAL INSPECTION**

A Final Inspection was completed on all reclaimed project sites, both at **CAMERON 6** and **COPPERMINE 2** , on January 29,2003.

Further discussions need to be done for site NA-0116 / Area D because safety is of a great concern. Options have been discussed and a meeting has been set to discuss this issue.

There was no occurrence of any reportable injuries nor time-lost accidents on this project.

Overall, the reclaimed project sites was completed within the scheduled time frame and the final inspection results was satisfactory.

**Sign In Sheet for Western Navajo Plateau AML Reclamation Project  
Contract No. C22342**

**February 20, 2003**

**Close Out Meeting**

Name / Title	Organization	Phone #
1. Vivienne Tallbulla	Silver State Constr.	(505)-368-4144
2. Russell Tallbulla W.P.	SSCC	(505) 368-4144
3. Timothy James	Superv. SSCC	(808) 368-4144
4. Ernest J. Freyzer	NAMLRP-	(928) 283-3188
5. L. J. Houser	NAAMLRP-	928 283-3188
6. Lorenzo Freyzer	NJ AMLRP	928-283-3188
7. Carl Houser	S/R AML	(505) 368-1220
8. Melvin H. Yazzie	NAMLRP-S/R	505-368-1220
9. Ray Jangin	TC AML office	(928) 283-3188
10. Ray Jangin	S/R AML	(505) 368-1220
11. _____		
12. _____		

### CLOSE OUT MEETING

**Date:** Thursday , February 20,2003  
**Time:** 10:00 AM  
**Location:** Kayenta NTUA Conference Room  
**Project :** Western Navajo Plateau AML Reclamation Project  
**Contract Cost:** \$415,722.14  
**Contract No:** C22342  
**Project Duration:** 120 Calendar Days with a 4 Calendar Days extension  
**Construction Start:** September 30,2002  
**Construction End:** January 31,2003

#### **OWNER'S REPRESENTATIVE:**

Navajo Abandoned Mine Lands Reclamation Program (NAMLRP), DNR  
Mr. Raymond Tsingine , Program Manager II  
Tuba City AML Program  
P.O. Box # 730  
Tuba City , Arizona 86045  
(928) 283 - 3188  
Fax # (928) 283 - 3192

#### **CONTRACTOR:**

Vivienne Tallbull, President  
Silver State Construction Company , Inc.  
P.O. Box # 3000  
Shiprock , New Mexico 87420  
(505) 368 - 4144  
Fax: (505) 368 - 4175

#### **FINAL SITE INSPECTION:**

January 29,2003	Coppermine 2 Project sites and Cameron 6 Project sites
January 29,2003	Maintenance Project - NA-0175
January 29,2003	Coalmine Mesa - NA-0141

#### **NOTE:**

\* A CHANGE ORDER # 1 was completed for additional work at NA-0164 for an extra 1,500 bcyds of Class A cover material. The extra material was necessary for final cover of mine waste, pursuant to NAMLRP radiological cleanup guidelines; per Section 6, TS-36.

A four (4) calendar days extension was added to term of contract from September 30,2002 to January 31,2003.

#### **Invoices Received:**

Invoice # 001 - completed  
Invoice # 002 - completed  
Invoice # 003 - completed

Invoice # 004 (Final Invoice) being processed - Per GC-20, NAMLRP needs to issue a NOTICE OF FINAL ACCEPTANCE before retainage can be claimed. Also requires the release of all liens.

Final Retainage - Per GC-20, NAMLRP needs to issue a NOTICE OF FINAL ACCEPTANCE before retainage can be claimed. Also requires the release of all liens.

**NAVAJO ABANDONED MINE LANDS RECLAMATION PROGRAM  
WESTERN NAVAJO PLATEAU AML PROJECT**

**FINAL INSPECTION CHECKLIST PER CONTRACT**

**NA-0112: Rimstrips and Mine Waste Disposal**

Access Roads	<u>Road from powerlines west of site was used, not the designated road.</u>
Mine waste excavation	<u>All mine waste was excavated and consolidated into the two burial areas.</u>
Class A coverage	<u>Class A coverage obtained from NW area w/in site and contoured properly</u>
Drainage patterns	<u>All drainages look okay, not blocked. Drainage - existing natural outcrops .</u>
Radiological Verifications	<u>Area naturally high, areas are good below.</u>
Contouring/Scarifying	<u>Area scarified and contoured with in with natural terrain.</u>
Compliance with NEPA	<u>NEPA complied with except access road</u>
Comments	<u>Scope of work is okay, natural outcrops remaining. No diversion berms were noticed.</u>

**NA-0113: Rimstrips and Mine Waste Disposal**

Access Roads	<u>Access road from nearby main road was utilized so no problems noted.</u>
Mine waste excavation	<u>All mine waste was excavated and hauled to the (3) three designated burial areas, no excess visible waste with all areas covered and contoured.</u>
Class A coverage	<u>Specified Class A was utilized, borrow areas were contoured accordingly</u>
Drainage patterns	<u>Site was properly contoured to allow positive drainage, no blocked channels</u>
Radiological Verifications	<u>Site was verified and meets AMLR guidelines.</u>
Contouring/Scarifying	<u>Site was properly contoured and scarified with dozer tracking</u>
Compliance with NEPA	<u>Site is in NEPA compliance</u>
Comments	<u>Work on this site was done well, looks good with no problems noted.</u>

**NA-0114a: Rimstrips and Mine Waste Disposal**

Access Roads	<u>One main road was utilized and was eliminated at site completion.</u>
Mine waste excavation	<u>The (3) three areas have all the mine waste eliminated and buried within the respective rimstrips and contoured. No excess waste is visible.</u>
Class A coverage	<u>Class A from access road was used and disturbed areas properly contoured.</u>
Drainage patterns	<u>No drainage patterns blocked ,area has positive drainage flows.</u>
Radiological Verifications	<u>Site was verified and meets AMLR cleanup guidelines.</u>
Contouring/Scarifying	<u>Site was contoured properly and scarified by dozer tracking.</u>
Compliance with NEPA	<u>NEPA compliance is okay.</u>
Comments	<u>Project sites consists of three areas, all rimstrips. The main ridge has one drillhole outside of this project's scope of work that might have to be addressed in the near future.</u>



**NA-0114d: Rimstrips and Mine Waste Disposal****Areas A and B**

Access Roads Area B - eliminated from main road, access roads look okay.

Mine waste excavation All buried in rimstrip areas, no excess waste is visible.

Class A coverage Material from borrow areas was used and contoured accordingly.

Drainage patterns Site was properly contoured with no blocked channels.

Radiological Verifications Both sites meet NN AMLR guidelines.

Contouring/Scarifying Area contoured and scarified as specified.

Compliance with NEPA Both sites are in compliance.

Comments Area A and Area B, both look good, no problems.

**NA-0116: Rimstrips and Mine Waste Disposal**

Access Roads Access road at wash crossing was disturbed but all other roads utilized properly.

Mine waste excavation Area A- all mine waste was excavated with Area 1 designated as Class A and used as cover. Contoured was done as specified.

Class A coverage Designated borrow area was utilized, surface was contoured and scarified.

Drainage patterns All drainage patterns have been re-established, no blocked channels, positive flow apparent.

Radiological Verifications All areas were verified except for small area in Area D.

Contouring/Scarifying Contoured in with natural terrain and scarifying looks good.

Compliance with NEPA This project site is in compliance except for wash crossing.

Comments This project site consists of four rimstrip areas. Small area, approx. 150 bcy, of Area D was not addressed, due to explosives. This will be resolved at a later date. 1-2 drillholes have been exposed and will be assessed.

**NA-0158a Rimstrips and Mine Waste Disposal**

Access Roads The appropriate road was used with minimal upgrades. No elimination required.

Mine waste excavation The designated mine waste was consolidated and buried. Other natural outcrops were not disturbed.

Class A coverage Class A was transported in from borrow area and placed, contoured and scarified.

Drainage patterns Positive drainage was established with diversion berm constructed upgradient.

Radiological Verifications Site meets NN AMLR guidelines. Small natural outcrop still exists, will not be addressed.

Contouring/Scarifying Site was properly contoured and scarified.

Compliance with NEPA This site is in compliance with NEPA guidelines.

Comments This site looks okay, some reduction in main burial area could've been done. Class A material was transported in from designated borrow area.

**NA-0158b: Rimstrips and Mine Waste Disposal**

Access Roads The appropriate road was used with minimal upgrades. No elimination required.

Mine waste excavation Designated mine waste was consolidated. Some natural outcrops was not disturbed. Burial mound should've been lower.

Class A coverage Class A transported in from borrow area; placed, contoured and scarified properly.

Drainage patterns Positive drainage established with no diversion berm(s).

Radiological Verifications Site has been verified, meets NN AMLR guidelines.

Contouring/Scarifying Site was properly contoured and scarified.

Compliance with NEPA This site is in NEPA compliance.

Comments Project site looks good overall, except for burial mound which should've been lower. Class A material was transported in from designated borrow area.

NA-0159: Rimstrips and Mine Waste Disposal

Access Roads Approved road was used,an attempt to rip road was done at site work completion.

Mine waste excavation All mine waste was excavated and buried, no excess waste is visible.

Class A coverage Class A material was transported in; placed,contoured and scarified properly.

Drainage patterns Positive drainages was re-established,looks good.

Radiological Verifications Site meets NN AMLR guidelines.

Contouring/Scarifying This site was properly contoured and scarified.

Compliance with NEPA This site is in NEPA compliance.

Comments This site looks okay.

NA-0164: Open Pit and Mine Waste Disposal

Access Roads Site is situated adjacent to main road so no access road is necessary.

Mine waste excavation All mine waste was buried in place,not specifically moved per selective handling technique,thus more work was required to addressed mine waste.

Class A coverage Class A came from designated borrow area and from on-site, more than specified.

Drainage patterns Positive drainage has been implemented, no drainages blocked.

Radiological Verifications Site meets NN AMLR guidelines.

Contouring/Scarifying Site was properly contoured and scarified.

Compliance with NEPA NEPA standards has been complied with.

Comments The mine waste burial and Class A material was increased from actual on-site conditions, thus CHANGE ORDER # 1 was processed to compensate the contractor.

NA-0175: Dike Repair

Access Roads Approved road was utilized and scarified as required.

Mine waste excavation N/A

Class A coverage Dike was rebuilt and expanded accordingly per specifications.Results good.

Drainage patterns Positive drainage was implemented.

Radiological Verifications N/A

Contouring/Scarifying The borrow area and access road was scarified, not the dike.

Compliance with NEPA NEPA standards has been complied with.

Comments The scope of work was revised to lower the overall height of the dike because of the need for a different borrow area location causing a longer hauling distance. The contractor was claiming compensation for extra material but this issue has been settled with no further compensation.

NA-0141: Subsidences

Access Roads The appropriate road was utilized and left in place.

Mine waste excavation N/A

Class A coverage Class A cover was applied on mounding and contoured accordingly.

Drainage patterns Positive drainage was implemented by contouring.

Radiological Verifications N/A

Contouring/Scarifying Proper contouring and scarifying was done.

Compliance with NEPA NEPA standards was complied with.

Comments Overall, scope of work on this site was done according to specifications.

NA-0250 and NA-0251: Open Prospects

Access Roads Wrong road into site was used, need to check the NN Archeaology Report.

Mine waste excavation All copper waste was buried with no excess waste visible.

Class A coverage All reclaimed areas have cover and sloped against natural rock formation.

Drainage patterns Minimal drainage work was implemented.

Radiological Verifications N/A

Contouring/Scarifying All areas have been contoured and scarified.

Compliance with NEPA Most of NEPA was complied with except the access road.

Comments Overall scope of work was done well.

NA-0252 Rimstrips, Concrete Structures, and Mine waste Disposal

Access Roads The appropriate road was used and slightly eliminated.

Mine waste excavation All copper mine waste and concrete structures were buried in designated burial locations with no visible excess waste.

Class A coverage All areas have coverage and slightly mounded.

Drainage patterns Positive drainages established with no blocked channels.

Radiological Verifications N/A

Contouring/Scarifying Contouring and scarifying was done as specified.

Compliance with NEPA NEPA standards was complied with.

Comments Need to monitor buried concrete structures for future settling. Overall this site looks good.

NA-0253 Prospect, Rimstrip and Mine Waste Disposal

Access Roads Appropriate road was utilized and left in place for local residents.

Mine waste excavation All copper mine waste was excavated and buried according to specifications.

Class A coverage Site has coverage and was sloped against highwall as required.

Contouring/Scarifying All areas was contoured and scarified .

Compliance with NEPA NEPA standards was complied with.

Comments Small site with with straight forward backfill work, results look good.

**NA-0254** Open Pit, Rimstrip, and Mine Waste Disposal

Access Roads Appropriate roads were utilized and eliminated following site completion.

Mine waste excavation All possible copper mine waste was excavated based on equipment used and buried accordingly.

Class A coverage No extra Class A was required, except the copper material.

Drainage patterns Positive drainage patterns was established with no blocked channels.

Contouring / Scarifying Site was contoured and scarified.

Compliance with NEPA NEPA standards was complied with.

Comments The open pit has some highwalls sloped, but could have been sloped more.  
The overall features have been backfilled and contoured, looks good.

**NA-0255** Prospects, Rimstrips and Mine Waste Disposal

Access Roads Appropriate road was utilized, most of it was eliminated at site completion.

Mine waste excavation All copper mine waste was excavated and utilized to backfill the mine features and slope areas.

Class A coverage Class A was not specified.

Contouring / Scarifying This scope of work looks good.

Compliance with NEPA NEPA standards was complied with.

Comments This site was situated on steep terrain, overall looks very good.

**NA-0256** Prospect

Portal Closure PUF and block bulkhead closure was used with exterior Class A cover.

Compliance with NEPA NEPA standards was complied with.

Comments Extra work using PUF was performed by contractor, site looks good.

**NA-0257** Prospect and Mine Waste Disposal

No action on this project site, deleted as Field Order # 1

**NA-0258** Vertical Shafts, Rimstrips and Mine Waste Disposal

Access Roads Appropriate road was utilized and scarified upon completion.

Mine Waste Excavation All copper mine waste was compiled and buried as required.

Class A coverage Coverage material was mounded accordingly.

Contouring / Scarifying Areas were contoured and scarified as specified.

Compliance with NEPA NEPA standards was complied with.

Comments Overall site looks good.

**NA-0259** Open Prospect

Portal Closure PUF closure work was done according to specifications.

Radiological Verifications Verified by NN AML field crew

Compliance with NEPA Site is in NEPA compliance

Comments This site was not part of Final Inspection Tour, but extra rock cover was added and verified by NN AML field crew.

**General Comments:** Concerns, Recommendations, Follow ups on Scope of Work and Final Inspection.

All radiological maps for uranium sites needs to be signed off by the HEALTH PHYSICIST.  
Further discussions to be done on project site, NA-0116 / Area D, options have been discussed with safety concerns a big issue. Overall the project sites look good.



**Sign In Sheet for Western Navajo Plateau AML Reclamation Project  
Contract No. C22342**

**February 20, 2003**

**Close Out Meeting**

Name / Title	Organization	Phone #
1. Vivienne Tambull	Silver State Constr.	(505)-368-4144
2. Russell Tambull W.P. SCCC		(505) 368-4144
3. Timothy James Superr. SCCC		(505) 368-4144
4. Ernest Haynes	NAMLRP-	(928) 283-3188
5. L. J. Hesse	NAMLRP-	928 283-3188
6. Lorenzo Haynes	NN AMLRP	928-283-3188
7. Carl Hays	S/R AML	(505) 368-1220
8. Melvin H. Yazzie	NAMLRP-S/R	505-368-1220
9. Ray Jangin	TC AML office	(928) 283-3188
10. Haynes	S/R AML	(505) 368-1220
11.		
12.		



Lorenzo

**Silver State  
Construction Co. Inc.**

# Fax



**To:** Ray Tsingine

**From:** Russell Tallbull

**Fax:** (928) 283-3192

**Pages:** 12

**Phone:** (928) 283-3188

**Date:** 2/17/2003

**Re:** NA-0116D Western Navajo Plateau

**CC:** Tim Bitsie

☐ Urgent    ☒ For Review    ☐ Please Comment    ☐ Please Reply    ☐ Please Recycle

● **Comments:**

Please find relevant information concerning above referenced site.

**SILVER  
STATE CONSTRUCTION CO., INC.**

CORPORATE OFFICE: P. O. Box 685 • DOLORES, CO 81323  
(970) 882-7925 • FAX (970) 882-4015

P. O. Box 3000 • SHIPROCK, NM 87420

PHONE (505) 368-4144  
FAX (505) 368-4175

February 14, 2003

Mr. Ray Tsingine, Program Manager  
Navajo Abandoned Mine Lands Reclamation  
P.O. Box 730  
Tuba City, Arizona 86045



Re: Western Navajo Plateau AML Reclamation Project.

Dear Mr. Tsingine,

Enclosed you will find a copy of the report submitted by Blasting and Mining Inc. concerning remediation and recommendations for site NA-0116d.

Based upon his report Silver State Construction Co. Inc.(SSCC) is awaiting your response relative to a change of conditions in the contract concerning site NA-0116d. SSCC is of the opinion that several options are available to remedy the situation and is ready for discussion.

For information purposes, please find all relevant correspondence concerning this matter.

If you need any further information, please contact our office at your convenience.

Sincerely,

Russell Tallbull  
Vice President

cc. Vivienne Tallbull, President  
Tim Bitale, NOSHA



P.O. Box 656 • Cortez, CO 81321

**Blasting & Mining Inc.****Custom Drilling and Blasting**

Office: (970) 565-7711

Call: 970-749-0182

February 12, 2003

**Silver State Construction Company, Inc.**

Attn: Russell Tallbull

PO Box 3000

Shiprock NM 87420

**RE: Remediation Summary & Recommendations for future dynamite corrective action at Site NA-0116D/Western Navajo Plateau AML Reclamation Project.**

**Mr. Tallbull,**

Per your request, please find below a general summary of the corrective action performed by Blasting & Mining, Inc. on the dynamite found at Site NA-0166D as well as recommendations and precautionary measures that need to be taken into consideration prior to any future earthmoving in the immediate vicinity of the recently discovered dynamite.

On the morning of December 11, 2002, I arrived at Site NA-0116D and witnessed numerous sticks of dynamite scattered over an approximate 30' X 30' area. A Silver State Construction Trackhoe Operator had been excavating mine waste and unknowingly disturbed a box of dynamite that had been concealed under a rock overhang. Some of the dynamite sticks were broke while others were completely intact. Many of the sticks had crystals that were clearly visible on the outside the dynamite. It was also evident through soil discoloration that Nitro from the dynamite had leached out locally into the soil. The existence of crystals as well as localized soil discoloration are indicators that the dynamite is still very volatile.

Based both on my previous experience and on the condition of the dynamite, I determined that the safest way to remediate the hazard was to consolidate the sticks and burn them on site. Approximately 77 sticks or part there of, were consolidated and burned on site.

No exploratory work was performed on December 11, 2002 in order to determine if more dynamite existed in the adjacent spoil pile (s). This was apparently a written directive from the Navajo AML to Silver State Construction. No equipment was available on site in order to explore the remaining waste piles for potential explosive hazards.

Blasting & Mining, Inc. is concerned that there still may be, and most likely is more dynamite in the adjacent spoil pile (s). Please find below a list of recommendations for any future corrective action at Site NA-0116D.

1. Explore the adjacent spoil pile (s) via rubber-tired backhoe in order to confirm the existence or nonexistence of any more dynamite. **DO NO PERFORM ANY EARTHWORK IN THE IMMEDIATE AREA (LE URANIUM MINE WATER RECLAMATION) WITHOUT CONFIRMING THE EXISTENCE OR NONEXISTENCE OF MORE EXPLOSIVES!**
2. Have a certified professional blaster on site during the exploratory work in order to provide recommendations for excavating and remediating the dynamite in the safest way possible.
3. Until all explosive hazards are known to be remediated, secure the area by erecting a perimeter fence. Fence should be of solid construction, 6' high (minimum), and have three strands of barbed wire at the top. Fence should have a lockable gate and appropriate signs (i.e. "DANGER, KEEP OUT", or equal) should be installed on all sides.
4. If explosives are found, remediate the explosives As Soon As Possible.

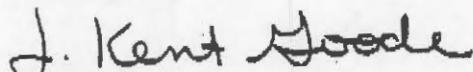
There is no set procedure for remediating or disposing of old explosives. Explosives are generally dealt with on a case-by-case basis. It is imperative however that old explosives are taken care of as quickly as possible. Historically, Blasting & Mining, Inc. has used three general methods for disposing of old explosives:

1. Consolidate explosive materials and burn in place.
2. Consolidate explosive materials and explode in place.
3. Transport explosive materials via Metal Powder Magazine to a safe location and burn or explode.

In conclusion, old explosives can be extremely volatile and need to be dealt with on an individual basis as quickly as possible. If explosives can not be disposed of immediately, then the area of concern needs to be secured with a stable, lockable fence with appropriate signage. In situations where there is a great potential for encountering explosives, such as at Site NA-0116D, exploratory work must be pre-formed in order to protect the Owner, contractor, and the general public.

Please feel free to call me if you have any questions.

Thank you,



J. Kent Goode  
Blasting & Mining, Inc.  
President/Owner

JKG/saf



NAVJO  
NATION



Kelsey A. Begaye

Taylor McKenzie, MD


PRESIDENT

VICE-PRESIDENT

November 27, 2002

MEMORANDUM

TO: Ray Tsingine, Program Manager II  
Tuba City AML Reclamation Program

FROM:   
Carl Holiday, Health Physicist  
Shiprock AML Reclamation Department

SUBJECT: Explosive at NA-0116, Area D

On November 26<sup>th</sup>, 2002 at approximately 1:20 p.m., Lorenzo Begay, Principal Engineering Technician called me and informed that the Trackhoe operator, Rudy Horseherder had uncovered dynamite at Site NA-0116, Area D. Mr. Begay informed me that the work in the area was shut down and work in other areas of the site was continuing. I informed Mr. Begay that I will be at the site first thing in the morning, November 27, 2002 to inspect and evaluate the situation.

This morning I arrived at NA-0116, Area D at approximately 7:25 a.m. and met Mr. Begay and Daniel Yazzie, Engineering Aide at the designated access control station. We proceeded to the area where the explosives had been uncovered. The location of the explosives was at southwestern edge of Area-D, waste area 2. We observed approximately 20 sticks of dynamite in one pile along with broken pieces the explosives crate board. We also found one full and one broken half piece approximately 10 feet to the south and one more full piece in the stock pile approximately 20 feet to the west. The dynamite appear to have been well preserved and I did not see any signs of sweating. One of the broken dynamite exposed the powder inside and it appeared normal dry.

The dynamite could have been stored at the location for more than twenty five (25) years. The dynamite appears to have been stored under a natural ledge, upon completion of the mining the waste was pushed over the side of the hill and burying the explosives. On November 26<sup>th</sup>, during normal excavation of the mine waste during a reclamation project, Mr. Horseherder scooped up a load of dirt and dumped the waste into a pile. Prior to loading more dirt he discovered the explosives and stopped work and reported it immediately.

In the past, Navajo AML has come upon similar situations on other projects and have addressed them by bringing a certified blaster to detonate the explosives. Since, Navajo AML does not have the expertise, supplies, equipment or storage location, I recommend that Navajo AML hire or consult with a specialized person or firm to detonate the explosives. The certified vendor should recommend and be able to remove or detonate the dynamite.



**MEMORANDUM RE: Explosive at NA-0116, Area D**

**DATE:** November 27, 2002

**PAGE:** 2

An item of concern which would require some attention prior to, during and after the demolition of the explosive is the area approximately fifty (50) feet to the north from where the present explosives are located and where the mine waste has not been excavated yet. My concern is well there be any more explosives hidden under the mine waste that still need to be excavated and moved to another location. The Contractors representative and AML representatives should consult and clarify how to address the remaining area. The certified blaster should have a explosive detecting equipment to scan the other areas or make an attempt to see if there are any more explosive buried under the remaining waste piles.

If you have any questions or need further assistance, I can be reached at the Shiprock AML Field Office at (505) 368-1220.

**XC: Madeline Roanhorse, Department Manager III  
Rose Grey, Program Manager II  
Melvin H. Yazzie, Senior Reclamation Specialist  
Western Navajo AML Project Files**

Navajo Abandoned Mine Lands Reclamation Department  
(NAMLRD)

PO Box 3605 • # 1 Uranium Boulevard  
Shiprock, New Mexico 87420

NAMLRD-TUBA-CITY

DEC-06-02 11:43 AM

ENCLOSURE 00000000

FROM

(MON) 2 17 2003 12:36/ST.12:29/NO.5510692242 P 6  
919283188 P.02

COPY

**SILVER  
STATE CONSTRUCTION CO., INC.**

P. O. Box 3000 • SHIPROCK, NM 87420

CORPORATE OFFICE: P. O. Box 685 • DOLORES, CO 81323  
(970) 882-7925 • FAX (970) 882-4015

PHONE (505) 368-4144  
FAX (505) 368-4175

December 4, 2002

Mr. Ernest Grayeyes, Project Manager  
Navajo Abandoned Mine Lands Reclamation  
P.O. Box 730  
Tuba City, Arizona 86045

Re: Western Navajo Plateau AML Reclamation Project.

Dear Mr. Grayeyes,

Silver State Construction Co. Inc. (SSCC) is requesting an update on the status of the discovered dynamite on site NA-0116 on November 26, 2002.

As of November 27, 2002, it has been entered into record that SSCC was informed to vacate the site and has been released of responsibility for any further incidents that may occur in conjunction with the dynamite. SSCC was informed that direction from NAML would be forthcoming early this week (week of December 2, 2002).

SSCC is on standby for further instructions or advisement. Please inform us as soon as possible of the action that NAML would like to take.

Sincerely,



Russell Tallbull  
Vice President

cc. Ray Tsingine, Program Manager  
Madeline Roanhorse, Director

**FAXED**  
12/05/02

**MAILED**  
12/05/02



# THE NAVAJO NATION

P. O. BOX 9000 • WINDOW ROCK, ARIZONA 86515 • (520) 871-6000

KELSEY A. BEGAYE  
PRESIDENT

TAYLOR MCKENZIE, M.D.  
VICE PRESIDENT

December 4, 2002

Vivienne Tallbull, President  
Silver State Construction Co. Inc.,  
P.O. Box 3000  
Shiprock, New Mexico 87420

RE: Revised Scope of Work, Proposal and Cost Estimate @ NA- 0116D  
Western Navajo Plateau AML Reclamation Project - C#22342

Dear Mrs. Tallbull,

Per Contract #C22342 for the Western Navajo Plateau AML Reclamation Project and our site assessment/investigation on November 27, 2002, this is a follow up to our analysis in regard to the discovery of dynamite explosives within site NA-0116D. No further work will be performed at site NA-0116D until further notice and you are to proceed on with AML reclamation at site NA-0112 and NA-0113.

NAMLRP recognizes that this will be additional Scope of Work for SSCC and is requesting a proposal, cost estimate and schedule so we can initiate a CHANGE ORDER for the work. Again, no further work will be performed on site NA-0116D until the CHANGE ORDER is approved and finalized. The following is a revised Scope of Work require to address the hazardous explosives.

- A site assessment to determine the amount of dynamite explosives.
- Proposal for the removal and/or detonate of the dynamite explosives.
- Itemize cost estimate and schedule for the additional work.

Thank you for your coordination and timely attention to this matter. If you have any questions, please contact either me or Mr. Melvin H. Yazzie, Shiprock AML Office at (505) 368-1220.

Sincerely,

Ray Tsingine, Program Manager II  
Tuba City AML Reclamation Program

xc: Madeline Roanhorse, Director NAML/UMTRA  
Melvin Yazzie, S/R AML Office  
Western Navajo Plateau AML Reclamation Project file

# SILVER STATE CONSTRUCTION CO., INC.

P. O. Box 3000 • SHIPROCK, NM 87420

CORPORATE OFFICE: P. O. Box 685 • DOLORES, CO 81323  
(970) 882-7925 • FAX (970) 882-4015

PHONE (505) 368-4144

FAX (505) 368-4175

December 6, 2002

**FAXED**  
12/6/02

NAML-Tuba City Office  
Attn.: Ray Tsingine  
Program Manager II  
PO Box 730  
Tuba City, AZ 86045

RE: Price Proposal for evaluating and remediation of dynamite found at Site NA-116D/ Western Navajo Plateau AML Reclamation Project / C#22342.

Mr. Tsingine,

## I. Introduction.

Per your request, SSCC is submitting herein a proposal and cost estimate for evaluation and remediation of the dynamite at Site NA-0116D.

SSCC has scheduled Kenny Goode of Blasting and Mining, Inc. for a site visit, evaluation, and possible remediation of said dynamite for 12-9-02. SSCC & Mr. Goode shall arrive at the Tuba City AML office at approximately 10:00 am in order to meet up with you and your staff and then visit the site.

## II. Possible Solutions without Blasting.

Through my phone conversations with Mr. Goode today, there are two possible solutions for dealing with the dynamite without having to Blast on site. Both solutions listed below are dependent upon Mr. Goode's visual evaluation of the old dynamite.

The first alternative is to load the old dynamite into Mr. Goode's Metal Powder Magazine. This pickup mounted Magazine is an explosion-proof metal box used to transport explosive materials. Mr. Goode would then transport the old dynamite, etc. to an alternate location (away from structures, etc.) and remediate the explosives according to acceptable general industry practices.

The second alternative is to consolidate all the sticks, etc. on top of readily burnable material (newspaper, paper towels, etc.) and light the material on fire. Contrary to popular belief, this does not generally produce an explosion, as most dynamite has to be detonated. Mr. Goode has successively used this procedure on previous jobs.

Please note that both alternatives above are dependent upon the visual characteristics of the dynamite sticks and whether or not any blasting caps and/or fuses exist within or near said dynamite. SSCC in coordination with Blasting & Mining, Inc. believe that both alternatives are possible, given that the unforeseen dynamite was inadvertently "hit" with a heavy piece of equipment without incident (i.e. without explosion). The advantages to these alternatives are that no blasting has to take place on site. However, Mr. Goode will give his professional opinion after visual observation as to which alternative may or may not be used.

### III. Possible Solution Utilizing Blasting.

The third alternative is to consolidate and blast the old sticks of dynamite through the use of a new, single stick of dynamite, primer cord, detonator, and prell. This technique was successfully utilized on a previous NAML reclamation project in Sweetwater, Arizona.

The first step is to position the old box of dynamite under the "rock overhang". Single sticks of dynamite disturbed previously during the initial remediation shall also be carefully placed on top of the box of dynamite. Granular prell is then poured on top of and around the base of the box. The single stick of dynamite with new detonator and primer cord are then placed on top of the old explosives. The final step is to detonate the explosives. Mr. Goode shall perform all work items detailed herein.

If it is decided that this third alternative is the best method to use after visual observation by Mr. Goode and direct coordination with SSCC and NAML representatives, then the operation would mostly likely need to take place on Wednesday, December 11, 2002. This would allow enough time to notify the local residences (i.e. within 1/4 mile), police & fire departments of the blasting activities. Notification would need to take place on December 10, 2002.

### IV. Mobilization.

In order to complete reclamation activities at Site NA-0116D after dealing with the dynamite, SSCC will need to mobilize back to the site. Some exploratory excavation will be required to ensure no more dynamite exists within the immediate area. As previously discussed, this is an added expense directly associated with the unforeseen dynamite finding.

### V. Pricing.

Please find below a pricing schedule detailing work items and the associated additional costs.

#### Pricing Option A:

A.) Evaluation & Remediation via Alternative # 1 or # 2 (non-blasting):	\$2,300.00 (12-9-02)
B.) Additional Mobilization:	<u>\$2,800.00</u>
<b>Total Price of Option "A":</b>	<b>\$5,100.00</b>

**OR**

#### Pricing Option B:

A.) Evaluation of explosives on 12-9-02:	\$2,000.00 (12-9-02)
B.) Additional Mobilization:	<u>\$2,800.00</u>
C.) Remediation via Alternative # 3 (Blasting):	<u>\$2,500.00 (12-10-02)</u>
<b>Total Price of Option "B":</b>	<b>\$7,300.00</b>

### V.SUMMARY:

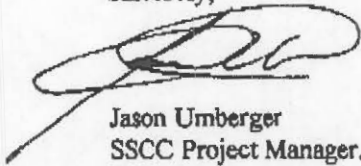
As discussed, the existence of explosives in an "open area" and near residences provides for a potentially dangerous situation. The alternatives provided above will allow for Blasting & Mining, Inc., SSCC, and NAML to formally determine the safest and most affective way to eliminate the dynamite hazard.

Per our phone conversation, the urgency of the situation does not allow for time to complete the S.A.S. process. The option of deleting one of the Copper Mine sites remaining on the aforementioned project in lieu of the costs associated with this unforeseen situation is an acceptable trade-off to SSCC.



Please review the SSCC price proposal and methodology for remediating the dynamite hazard on Site NA-0116D. If you have any questions or require further information, please give our office a call. Thank you in advance for your time and consideration.

Sincerely,



Jason Umberger  
SSCC Project Manager.

CC: Vivienne Tallbull; SSCC President.

**FIELD ORDER**  
**NAVAJO AML RECLAMATION DEPARTMENT**  
P.O. Box 730, Tuba City, Arizona 86045 (520)283-3188 Fax(520) 283-3192

Project Name: Western Navajo Plateau AML Reclamation Project Date: December 10, 2002  
Contractor Name: Vivlene Tallbull, President, Contract Number: C22342

Address: Silver State Construction Company, Inc., P.O. Box 3000, Shiprock, New Mexico, 87420

Project Engineer/Manager: Ernest Grayeyes Field Order No. One (01)

Use this form to authorize work changes due to changed conditions within the scope of WORK. Field Orders resulting in an increased Contract price or Completion time must be approved by a formal Change Order. The following changes are authorized at the direction of the PROJECT MANAGER and the PROFESSIONAL ENGINEER.

ITEM NO.	DESCRIPTION OF CHANGES
----------	------------------------

1. NAMLRP is proposing a trade off, to address the explosive discovered at the project site NA-0116D. SSCC will be compensated \$ 2,300.00 under alternative one (1) of their proposal, to dispose of the explosive only, no exploration work. Disposal of the explosive will be based on the evaluation of the certified blaster. SSCC will not be liable for future discovery of explosive on the project site NA-0116D after the completion of this task. To compensate SSCC, project site NA-0257 will not be done at this time. NAMLRP may include NA-0257 at a later date. The cost for project site NA-0257 was at \$ 2562.91.
2. This field order will not change any of the other tasks.
3. This Field Order will not affect the overall Contract time nor the Contract price.

Project Manager:

Date:

Project Engineer: Ernest Grayeyes

Date: 12/10/02

Program Manger:

Date:

Contractor:

Date: 12/10/02